

REMARKS

The applicants have carefully considered the Office action dated July 16, 2003 and the references it cites. In view of the following, it is respectfully submitted that all pending claims are in condition for allowance and favorable reconsideration is respectfully requested.

As an initial matter, the applicants respectfully traverse the 35 U.S.C. § 112, first paragraph, rejections. The Office action contends that the claims are not enabled by the specification. In particular, the Office action states that the phrase “develop a set of farms capable of growing a crop of interest” is not supported by the specification. Applicants respectfully note that the phrase itself has been in this application since the day the application was filed, let alone other language that describes the meaning of the phrase. For example, the objected-to phrase or a variant of that phrase appeared in at least claims 1, 18, 20, 21 and 43 as originally filed. Further, the third paragraph appearing on page 11 of the specification begins “For the purpose of developing a set of farms capable of growing a crop of interest ...the crop planner 10 is further provided with a farm identifier 40.” (Specification, Page 11, lines. 8-10). The following three paragraphs of the specification (i.e., page 11, line 8 – page 12, line 16) continue on to explain a detailed example of how a farm identifier may develop a set of farms capable of growing a crop of interest. The specification is filled with other examples of support for the objected-to phrase. (See, for example, Page 21, lines 10-21). Therefore, the 35 U.S.C. § 112, first paragraph, rejections are completely without basis and must be withdrawn.

The pending claims also stand rejected under 35 U.S.C. § 112, second paragraph, due to the alleged indefiniteness of the same aforestated phrase. The Office action states that the phrase is “not distinct enough to clarify the claim” and that “the applicant needs to go into more detail about how the machine is caused to develop a set of farms capable of growing a crop of interest.” (Office action dated July 16, 2003, page 3). Applicants respectfully traverse this rejection because, as further discussed below, the claims and supporting specification as written satisfy the requirements of the statute.

Whereas the “claims define the limits of the invention ... it is the function of the specification to detail how the invention is to be practiced.” In re Roberts and Burch, 176 U.S.P.Q. 313, 315 (C.C.P.A. 1973). Accordingly, there is no need to include more detail as to the working of the claimed machine so long as the claim language is clear to a person of ordinary skill in the art. As explained above, the applicants’ specification provides plenty of detail as to an example manner of practicing the invention, including an example manner of developing a set of farms capable of growing a crop of interest. See, for example, page 11, line 8 to page 12, line 16, *inter alia*. The statute, as noted in In re Roberts and Burch, *supra*, does not require the importation of those details into the claims, either literally or as a matter of claim interpretation. Therefore, the Office action’s statement that the details of how a machine might be caused to develop a set of farms capable of growing a crop of interest must be incorporated into the claim is incorrect as a matter of law.

Moreover, an examination of the objected-to phrase itself makes it evident that there is nothing unclear or indefinite about the language selected

by the applicants to define the invention. The object of the allegedly indefinite phrase, "a set of farms capable of growing a crop of interest," appears on its face to be clear to a person of ordinary skill in the art. As for the verb of the phrase, "develop," a person of ordinary skill in the art would have no trouble understanding "develop" to mean any or all of "create," "select," or "identify."¹ Thus, the objected-to phrase would be easily understood to a person of ordinary skill in the art reviewing applicants' patent application to mean "creating, selecting, and/or identifying a set of farms that are able to grow a crop of interest." Since there is no ambiguity to the phrase, it is evident that the 35 U.S.C. § 112, second paragraph, rejections are without basis in law or in fact and must be withdrawn.

Turning to the art rejections, the Office action rejects all pending claims as being unpatentable over one or more of Rawlins, U.S. Patent 5,845,229, Press-Enterprises article, "Flowers Grow Into Profitable, Global Business," and Monson, U.S. Patent 5,689,418. Applicants respectfully traverse these rejections.

As demonstrated in detail below, the cited art fails to meet nearly every limitation of the independent claims. In particular, the primary reference, Rawlins, is so far afield from the pending claims that no combination of the remaining cited art can cure its defects. To elucidate this point, applicants will first explain the disclosure of Rawlins.

¹ It should be noted that dependent claim 3, which has been unchanged since the day it was filed, uses the word "identifies" interchangeably with the word "develops" when it states, "the farm identifier identifies the set of farms based on ..."

Rawlins discloses a method and apparatus for mapping crop quality to field locations. In Rawlins, the farmer pre-selects individual field areas for crop quality assessment. (Rawlins, abstract, lines 2-4). Values representing these field locations are then stored in a computer memory. (Rawlins, abstract, lines 4-6). A harvester equipped with a global positioning system (GPS) is then used to harvest crops. (Rawlins, abstract, lines 1-2). When the GPS indicates that the harvester is harvesting in one of the field areas that the farmer pre-selected, a trigger signal is generated to cause a physical crop marker to be placed into the crops being harvested by the harvester. (Rawlins, abstract, lines 9-14).

Each marker is assigned a unique identifier. (Rawlins, abstract, lines 7-9). Thus, the harvester automatically stores the unique identifier in a table to associate the marker with the field location where the marker was dispensed. (Rawlins, abstract, lines 14-16). As a result, the marker labels the harvested crops physically containing the marker as having been harvested from a specific field location.

Later, when processing the crop, Rawlins attempts to locate the markers in the crop stream. (Rawlins, Col. 2, lines 31-33). When a marker is detected, a sample of the crop from around the marker is extracted and subjected to one or more quality tests. (Rawlins, Col. 2, lines 33-37). The quality tests then enable the creation of field maps mapping the crop quality parameters to the field positions that were tested. (Id.) As explained by Rawlins:

Data on the quality of the crop can then be kept with respect to the selected field locations. Additional data can be collected on

the selected field locations such as the amount of pesticide or herbicide and the amount of fertilizer and water applied to the selected field location. Over the course of years, the data can be collected and analyzed to determine which inputs of resources determine or optimize the quality of data obtained through the above method. The inputs can be modified to see how quality differs. Once enough data are gathered, the quality as an output can be optimized with respect to selected inputs. Furthermore, the profits for a quality crop can be compared to profits associated with a maximum yield plan from the same individual field area or crop management area 22 or 24.

(Rawlins, Col. 7, lines 14-28).

In summary, Rawlins discloses a system for tracking which fields or parts of a field were used to produce a given crop, and to use that information to map crop quality parameters to the fields or parts of fields as a vehicle to making better farming decisions. In other words, the Rawlins system is a farming data collecting system.

The invention claimed in claim 1 is very different than Rawlins. The invention recited in claim 1 is "an apparatus for selecting farms to grow a crop of interest." The Rawlins system does not select even a single farm to grow a crop of interest. Rather, as explained above, the Rawlins system is intended to gather data with respect to fields or portions of fields that are pre-selected by a farmer. Thus, the Rawlins system is not even directed at the same general end as the apparatus recited in claim 1.

Further, claim 1 recites a farm identifier to develop a set of farms capable of growing a crop of interest. Rawlins has no such structure. Instead, Rawlins expressly states that the farmer pre-selects the field positions that are to be monitored. Thus, even if the field positions identified by the farmer of

Rawlins can be viewed as separate farms as proposed in the Office action, Rawlins does not disclose or suggest a structure for developing a set of farms that are capable of growing a crop of interest.

Additionally, claim 1 recites a competition analyzer to estimate profits by farms for growing at least one crop which is different from the crop of interest. First of all, Rawlins does not disclose or suggest any structure to estimate profits for growing crops. At most, Rawlins discusses using the data collected with his system to compare the profits from a quality crop to the profits associated with a maximum yield plan. (Rawlins, Col. 7, lines 25-28). Comparing the actual profits achieved for a quality optimized crop to the actual profits achieved from a yield maximized crop is not estimating profits from growing crops. It is comparing actual profits to actual profits.

Further, even if one were to misconstrue lines 25-28 of Column 7 of Rawlins as teaching or suggesting profit estimation, it would still not teach or suggest a structure for estimating the profit to be earned by growing a crop ***which is different from*** the crop of interest. Indeed, even the Office action implicitly concedes this point as it replaces the claim language “for growing at least one crop which is different from the crop of interest” with ellipses when it attempts to read claim 1 on Rawlins. (See the Office action dated July 16, 2003, page 4). Therefore, more than one year after the Office first rejected this claim based on Rawlins, the Office still cannot find structure in Rawlins to meet this element of claim 1.

Claim 1 additionally recites an offer developer to determine possible offers to be made to farms based at least in part on the estimated profits to be earned for growing the at least one crop that is different from the crop of

interest. We already demonstrated above that Rawlins does not estimate profits, and that Rawlins does not estimate profits for growing a crop different than a crop of interest. Thus, it is clear that Rawlins cannot possibly make offers based at least in part on estimated profits to be earned for growing a crop different than the crop of interest. Moreover, even a cursory review of Rawlins demonstrates that Rawlins does not disclose a structure for making an offer of any kind.

The Office action attempts to find the claimed offer developer in Col. 6, lines 7-10 and lines 31-39 of Rawlins. Those passages are repeated here for ease of reference:

The actual position of the harvester is determined on a timed basis and is repeated periodically. The actual field position could also be determined continuously or at very short time intervals.

Once a match is found, the trigger signal is sent to the dispenser 40. In response to the trigger signal, the dispenser 40 inserts a crop marker into the crop stream as depicted by step 90. The crop marker is identified by some sort of identification means before or at the same time as the crop marker is inserted into the crop stream. Once inserted into the crop stream, the particular crop marker which has a unique identifier must be correlated to the selected field position where it was inserted into the crop stream.

The Office action attempts to find the claimed offer developer in these passages by arguing that, in Rawlins, "the field positions are in competition" with one another, (Office action, Page 4), as if the field positions could be construed to be separate farms. Applicants respectfully submit that it is

inappropriate to introduce such creative interpreting to finding support for rejecting a claim.

In any event, the Office continues on to argue that the offer developer is “analogous to the marker dispenser since it inserts a crop marker into the crop stream right before the crop marker is correlated or allocated to the selected field position.” In reality, however, Rawlins physically dispenses markers into harvested crops whenever a GPS system shows that the harvester is located in a position that is pre-selected by a farmer. Physically dispensing a marker into a harvested crop at predetermined locations to enable a tester to later tell where that crop was grown has absolutely nothing to do with determining a possible offer to make to a farm. Indeed, the plain meanings of the words “marker” and “offer,” uncontroverted by any aspect of the Rawlins reference, simply does not support the interpretation set forth by the Office action. They are different, completely non-overlapping concepts.

The Office continues with its creative interpretation of Rawlins, noting that the Rawlins “offer is based on a match between the selected field position and the actual field position, which is ultimately based on the quality of the crop which is co-dependent with the profits for a crop.” (Office action, page 5). However, this analysis turns Rawlins on its head. As discussed above, it is contrary to the plain meaning of the words to call a crop marker an offer. But even continuing with the Office’s unreasonable interpretation that a marker is an offer, Rawlins dispenses a marker whenever its harvester enters one of the locations that the farmer pre-selects. Thus, to say that the dispensing of markers is based on the quality of the crop is absolutely incorrect. Rawlins dispenses markers as a means to identifying the quality of the crops harvested

at predetermined locations in a field. It does not in any way, shape, or form dispense markers based on the quality of the crop. Again, crop quality and crop profits do not in any way enter into the decision to dispense a marker. Rather the markers are dispensed to enable crop testing to learn the crop quality. Therefore, the Office action's position that Rawlins teaches or suggests an offer developer finds no factual basis in Rawlins.

Before leaving this point, it is again worth noting that, rather than attempting to explain how Rawlins can possibly be contorted to meet the recitation of an offer developer to determine possible offers to be made to farms based at least in part on the estimated profits to be earned for growing the at least one crop *that is different from the crop of interest*, the Office action totally ignores the "different from the crop of interest" recitation. The Office action improperly ignores this claim language because the markers of Rawlins are not offers, are not possible offers, and cannot possibly be offers based at least in part on an estimated profit to be earned from growing a crop different than a crop of interest.

Claim 1 also recites a farm selector to select farms to receive an offer to grow the crop of interest. Rawlins has no structure that teaches or suggests such a farm selector. However, the Office again tries to distort Rawlins to meet this claim limitation by arguing that the crop marker of Rawlins is not only the offer recited in claim 1, but it is also the farm selector recited in that claim. Again, the crop marker is simply an identification number that is physically placed into a harvested crop to enable a tester to later determine where that crop was grown. It has nothing to do with selecting a farm to receive an offer to grow a crop of interest.

From the foregoing, it is evident that Rawlins fails to meet four out of the five recitations of claim 1. The Office attempts to fill this gap by referring to the Press-Enterprise article. However, while it is true that the Press-Enterprise article establishes that there are many farms in the world and that farmers sometimes receive subsidies to grow certain crops instead of other crops, it does not teach or suggest the farm identifier, the competition analyzer, the offer developer or the farm selector recited in claim 1. Since Rawlins also fails to teach or suggest these elements, no matter how one combines Rawlins and the Press-Enterprise article, one does not arrive at the combination of claim 1. Accordingly, claim 1 and all claims depending therefrom are allowable over the cited art.

Independent claim 52 is also allowable. Independent claim 52 recites the competition analyzer and the offer developer elements of claim 1 verbatim. As demonstrated above, neither Rawlins, the Press-Enterprise article, nor their combination have such structures. Therefore, claim 52 is allowable. Accordingly, claim 52 and all claims depending therefrom must be allowed over the art of record.

Independent claim 18 is also allowable. Claim 18 recites an article of manufacture storing machine readable instructions which, when executed, cause the machine to develop a set of farms capable of growing a crop of interest. As discussed above, Rawlins expressly states that the farmer pre-selects the field positions that are to be monitored. Thus, even if the field positions identified by the farmer of Rawlins can be viewed as separate farms as proposed in the Office action, Rawlins does not disclose or suggest developing a set of farms that are capable of growing a crop of interest.

Further, claim 18 specifies that the machine readable instructions cause a machine to estimate profits to be earned by farms for growing at least one crop that is different from the crop of interest. As discussed above, Rawlins does not disclose or suggest estimating profits for growing crops. Further, even if one were to misconstrue Rawlins as teaching or suggesting profit estimation, it would still not teach or suggest estimating the profits to be earned by growing a crop *which is different from* the crop of interest.

Moreover, claim 16 specifies that the machine readable instructions cause a machine to determine possible offers to be made to farms based at least in part upon the estimated profits to be earned for growing the at least one crop which is different from the crop of interest. However, as demonstrated above, Rawlins does not estimate profits, and Rawlins does not estimate profits for growing a crop different than a crop of interest. Thus, it is clear that Rawlins cannot possibly determine possible offers based at least in part on estimated profits to be earned for growing a crop different than the crop of interest.

Furthermore, claim 16 specifies that the machine readable instructions cause a machine to select farms to receive an offer to grow the crop of interest. While Rawlins does dispense crop markers to identify where a harvested crop was grown, Rawlins does not teach or suggest selecting farms to receive an offer to grow a crop of interest.

Thus, from the foregoing, it can be seen that Rawlins fails to teach or suggest any element of claim 18. Since as discussed above, the Press-Enterprise article merely establishes that there are many farms in the world and that farmers sometimes receive subsidies to grow certain crops instead of

other crops, regardless of how one combines Rawlins and the Press-Enterprise article, one does not arrive at the combination of claim 18. Accordingly, claim 18 and all claims depending therefrom are allowable over the cited art.

Independent claim 69 is also allowable. Claim 69 recites an article of manufacture storing machine readable instructions which, when executed, cause the machine to develop a set of farms capable of growing a crop of interest. As discussed above, Rawlins expressly states that the farmer pre-selects the field positions that are to be monitored. Thus, even if the field positions identified by the farmer of Rawlins can be viewed as separate farms as proposed in the Office action, Rawlins does not disclose or suggest developing a set of farms that are capable of growing a crop of interest.

Further, claim 69 specifies that the machine readable instructions cause a machine to estimate profits to be earned by farms for growing at least one crop that is different from the crop of interest. As discussed above, Rawlins does not disclose or suggest estimating profits for growing crops. Further, even if one were to misconstrue Rawlins as teaching or suggesting profit estimation, it would still not teach or suggest estimating the profits to be earned by growing a crop ***which is different from*** the crop of interest.

Moreover, claim 69 specifies that the machine readable instructions cause a machine to determine possible offers to be made to farms based at least in part upon the estimated profits to be earned for growing the at least one crop which is different from the crop of interest. However, as demonstrated above, Rawlins does not estimate profits, and Rawlins does not estimate profits for growing a crop different than a crop of interest. Thus, it is clear that Rawlins cannot possibly determine possible offers based at least in

part on estimated profits to be earned for growing a crop different than the crop of interest.

Furthermore, claim 69 specifies that the machine readable instructions cause a machine to select farms to receive a contractual offer to grow the crop of interest. While Rawlins does dispense crop markers to identify where a harvested crop was grown, Rawlins does not teach or suggest selecting farms to receive an offer of any kind to grow a crop of interest.

Thus, from the foregoing, it can be seen that Rawlins fails to teach or suggest any element of claim 69. Since as discussed above, the Press-Enterprise article merely establishes that there are many farms in the world and that farmers sometimes receive subsidies to grow certain crops instead of other crops, regardless of how one combines Rawlins and the Press-Enterprise article, one does not arrive at the combination of claim 69. Accordingly, claim 69 and all claims depending therefrom are allowable over the cited art.

In view of the remarks set forth herein, the application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue.

U.S. Serial No. 09/626,576

Response to the Office Action Dated July 16, 2003

If the Examiner is of the opinion that a telephone conference would expedite the prosecution of this case, the Examiner is invited to contact the undersigned at the number identified below.

Respectfully submitted,

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October 16, 2003